Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte HAYATO TESHIMA and TAKAAKI ITOH

Application No. 08/479,977

HEARD June 10, 2003

Before WILLIAM F. SMITH, SCHEINER, and GRIMES, <u>Administrative Patent Judges</u>.

GRIMES, <u>Administrative Patent Judge</u>.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 6 and 8-16, all of the claims remaining. Claim 6 is representative and reads as follows:

6. A method for controlling termites, comprising the step of applying to soil where termites are alive or wood, a termite controlling effective amount of a composition comprising (i) 3-(2,2-dihalovinyl)-2,2-dimethylcyclopropanecarboxylic acid 3-phenoxybenzyl alcohol ester, the alcohol of which may have a cyano group at α-position and (ii) N-(2-ethylhexyl)bicyclo[2.2.1]hept-5-en-2,3-dicarboximide in a weight ratio in the range of 1:1 to 1:20, as active ingredient and inert carrier.

The examiner relies on the following references:

Richardson et al. (Richardson) (European Patent Application)

0 149 005

July 24, 1985

Joyce et al. (Joyce), "Synergism of pyrethroids by piperonyl butoxide and MGK-264 against <u>Heliothis virescens</u>, <u>Spodoptera exigua</u>, and <u>Spodoptera frugiperda</u>," <u>J. Entomol. Sci</u>, Vol. 23, No. 3, pp. 229-234 (1988)

Claims 6 and 8-16 stand rejected under 35 U.S.C. § 103 as obvious in view of Joyce and Richardson.

We reverse.

Background

The specification discloses that "when pyrethroid compounds are used as a termite-controlling agent, they are not always satisfactory in the persistence of the efficacy in use for soil treatment, apart from that of the efficacy in use for wood treatment." Page 1. The specification discloses, however, that when a pyrethroid compound such as permethrin¹ is combined with the compound MGK-264,² the resulting composition "is an excellent termite-controlling agent which can solve the above problem." <u>Id.</u>

The specification provides data intended to show that the combination of permethrin and MGK-264 has more long-lived effectiveness than either compound alone. See pages 6-8: various combinations of permethrin and/or MGK-264 were added to soil and stored for two or three months, then tested for

¹ The chemical name of permethrin is 3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclo-propanecarboxylate. Specification, page 2, lines 11-12.

² The chemical name of MGK-264 is N-(2-ethylhexyl)bicyclo[2.2.1]hept-5-en-2,3-dicarboximide. Specification, page 1, lines 14-15.

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effectiveness against termites (<u>Coptotermes formosanus</u>). The results (Table 2) show that MGK-264 completely lost effectiveness after two months, and permethrin caused only 30% mortality after three months. The combination of MGK-264 and permethrin, however, caused 100% termite mortality even after three months' storage. Appellants concluded that the "composition is a termite-controlling agent excellent in the persistence of efficacy, and particularly it is extremely effective also in use for soil treatment." Specification, page 8.

Discussion

The claims are directed to a method for controlling termites by applying a combination of a pyrethroid (e.g., permethrin) and MGK-264 to termite-infested soil or to wood. The examiner rejected the claims as obvious over Joyce and Richardson:

The Joyce et al. reference teaches that the claimed combination of permethrin and MGK-264 is old and known for [its] synergistic insecticidal activity. The [Richardson] reference teaches that the claim designated permethrin is an old insecticide effective against termites. See page 4, line 13, wherein termites are disclosed; page 3, line 1, wherein, permethrin is the preferred insecticide; and page 2, line 2, wherein timber is treated. The prior art clearly teaches that permethrin is effective as a termite insecticide. The prior art also teaches that the combination of permethrin and MGK-264 is old and known for its synergistic insecticidal properties. Therefore, one skilled in the art would find ample motivation from the prior art supra to use the claimed combination of compounds against the target insects and locus of the instant application with a reasonable expectation that said compounds would be effective to combat said target insects.

Examiner's Answer, page 4.

Appellants argue that the examiner has not made out a <u>prima facie</u> case of obviousness and that, in any case, "any possible <u>prima facie</u> obviousness

rejection based upon Joyce and/or [Richardson] has been overcome by the showing in the specification." Appeal Brief, page 7. Appellants point specifically to the test results shown in the specification's Example 2, and argue that the increased efficacy of the claimed combination would overcome any <u>prima facie</u> case based on the examiner's cited references. <u>Id.</u>, pages 7-8.

The examiner did not respond to Appellants' argument based on unexpected results. See the Examiner's Answer, pages 4-5.

"In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a <u>prima facie</u> case of obviousness." <u>In re Rijckaert</u>, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). "The patent applicant may then attack the Examiner's <u>prima facie</u> determination as improperly made out, or the applicant may present objective evidence tending to support a conclusion of nonobviousness." <u>In re Fritch</u>, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992).

"When <u>prima facie</u> obviousness is established and evidence is submitted in rebuttal, the decision-maker must start over. . . . <u>Prima facie</u> obviousness is a legal conclusion, not a fact. Facts established by rebuttal evidence must be evaluated along with the facts on which the earlier conclusion was reached, not against the conclusion itself. Though the tribunal must begin anew, a final finding of obviousness may of course be reached, but such finding will rest upon evaluation of all facts in evidence, uninfluenced by any earlier conclusion reached . . . upon a different record." <u>In re Rinehart</u>, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). <u>See also In re Hedges</u>, 783 F.2d 1038, 1039,

228 USPQ 685, 686 (Fed. Cir. 1986) ("If a <u>prima facie</u> case is made in the first instance, and if the applicant comes forward with reasonable rebuttal, whether buttressed by experiment, prior art references, or argument, the entire merits of the matter are to be reweighed.").

In this case, Appellants have provided evidence that allegedly shows that the combination of permethrin and MGK-264 has unexpectedly superior persistence of efficacy. Appellants throughout prosecution have cited the data in the specification as evidence of unexpected results. See Paper No. 10, filed Dec. 13, 1996, page 7; Paper No. 13, filed July 21, 1997, page 4; Appeal Brief, pages 7-8.

In response, the examiner has pointed to nothing in the prior art that would have led a person of ordinary skill in the art to expect that combining permethrin with MGK-264 would result in a combination having the persistence of efficacy shown in the instant specification. In fact, despite Appellants' repeated reliance on the specification's data, the examiner never substantively responded to their "unexpected results" argument. See Paper No. 11, mailed Feb. 19, 1997, page 2; Paper No. 15, mailed Aug. 11, 1997; Examiner's Answer, pages 4-5. Thus, on this record, the examiner has not disputed Appellants' assertion that the specification provides evidence of unexpectedly superior results.

Summary

"[T]he conclusion of obviousness <u>vel non</u> is based on the preponderance of evidence and argument in the record." <u>In re Oetiker</u>, 977 F.2d 1443, 1446, 24 USPQ2d 1443,1445 (Fed. Cir. 1992). Since the examiner has not disputed Appellants' evidence of unexpected results, we agree with Appellants that the § 103 rejection is not supported by the weight of the evidence and must be reversed.

REVERSED

William F. Smith Administrative Patent Judge)))
Toni R. Scheiner Administrative Patent Judge)) BOARD OF PATENT
)) APPEALS AND
)) INTERFERENCES
Eric Grimes Administrative Patent Judge)))

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